

**TETRA TECH, INC.**

4213 State St., Suite 205
 Santa Barbara, CA 93101
 Telephone (805) 681-3100
 FAX (805) 631-3108

Project: **Vandenberg Air Force Base**Log of Well No. **7-MW-4**
 Location: **OU5, Site 7, Bear Creek Canyon, approx. 600 ft southeast
 of intersection of Bear Creek Canyon and Surf Road.**
Date Started: **7/1/94**Completed: **7/6/94**Logged By: **J. Bonebrake**Checked By: **R. Horwath, RG**Drilled By: **T. De Vries, Layne Env.**Drilling Equipment: **CME 750, HSA**Sampling Equipment: **2" ID Split-spoon**GS Elev.: **100.5** ft above MSLTD: **68.0** ft bgs4" PVC Blank Casing: from **0** ft bgs to **44** ft bgs.010 " Screened Casing: from **44** ft bgs to **64** ft bgsBentonite/Cement Grout: from **1.5** ft bgs to **38** ft bgsBentonite Transition Seal: from **38** ft bgs to **42** ft bgs2/12 Sand Filter Pack: from **42** ft bgs to **68** ft bgsTOC Elev.: **102.80** ft above MSL

Depth (ft bgs)	DESCRIPTION	Graphic/ USCS	Well Construction	Sample Blow Counts Per 6"	Percent Recovery	PID(ppm) Amb/Samp	REMARKS
	clayey silt very dark gray (7.5YR 3/4), fine grained, trace sand, well sorted, subrounded, low plasticity, soft, moist, alluvium.	ML		2 2 2	100	0.0/3	Start 0955. Sample V7MW4-0 sent for chemical tests.
	clay black (10YR 2/1), low to medium plasticity, stiff, moist, alluvium.	CL		3 4 7	60		Sample V7MW4-2MS sent for chemical tests.
5	silty sand gray (10YR 5/1), fine to medium grained, trace clay, well sorted, subrounded, medium dense, very moist, alluvium.	SM		4 5 9	17	0/0	
	Same, except dark gray (5Y 4/1) fine grained, very loose, alternating with 1/8" thick lenses of silty clay and sandy silt, wet, alluvium.			2 2 2	89	0/0	Sample V7MW4-5 and V7MW4-6 sent for chemical tests (replicates).
				1 1 1	100	0/0	
10				2 3 2	100	0/0	
	Same, except gray (5Y 5/1), minor fine grained sand, very moist to wet.			2 2 2	100	0/0	Sample V7MW4-15 sent for chemical tests.
15				2 2	100	0/0	

7.0 ft bgs ▾ Groundwater depth during drilling

+ 1.6 ft ▾ Groundwater depth after well development on:

7/22/94

TC Number: **7301-11****TETRA TECH, INC.**

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Depth (ft bgs)	DESCRIPTION	Graphic/ USCS	Well Construction	Sample	Blow Counts Per 6"	Percent Recovery	PID(ppm) Amb/Smp	REMARKS
	<u>clay</u> black (10YR 2/1), minor fine gravel, high plasticity, soft, very moist, alluvium.	CH			2			
25	<u>silty sand</u> gray (5Y 5/1), fine to predominately medium grained, well sorted, subrounded, medium dense, wet, alluvium.	SM			2	89	0/0	Sample V7MW4-25 sent for chemical tests.
	<u>clay</u> black (10YR 2/1), low to medium plasticity, stiff, very moist, alluvium.	CL			4			
	<u>silty sand</u> black (10YR 2/1), moderate fine gravel, moderately sorted, angular, medium dense, wet, alluvium.	SM			7			
30					3	0		
					2			
					1			
35	<u>clayey sand</u> dark gray (2.5Y 4/1), fine to medium grained, trace coarse sand, well sorted, subrounded, low plasticity, medium dense, wet, alluvium.	SC			6	83	0/0	
					6			
					6			
40	<u>silty sand</u> dark gray (2.5Y 4/1), fine to medium grained, well sorted, subrounded, medium dense, wet, alluvium.	SM			2	78	0/0	
	<u>clayey sand</u> dark gray (2.5Y 4/1), fine grained, moderate coarse gravel, well sorted, subangular, slight odor, very loose, wet, interlayered with <u>silty clay</u> , black (2.5Y 2.5/1), high plasticity, soft, wet, alluvium.	SC-CH			2			
					2			
					2			
	<u>sand</u> dark gray (2.5Y 4/1), fine grained, minor silt, moderately sorted, subrounded, medium dense, wet,	SP			6	83	0/0	Start of PVC vee-wire screen.
					11			

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Depth (ft bgs)	DESCRIPTION	Graphic/ USCS	Well Construction	Sample Blow Counts Per 6"	Percent Recovery	PID(ppm) Amb/Smp	REMARKS
	alluvium.	SP		14			
				10			
	silty sand with fine to coarse gravel, fine grained sand, well sorted, subangular, medium dense, wet, alluvium.	SM		11			
				14			
				14			
				6			
				8			
				8			
				8			
50				6	89	0/0	
				11			
				11			
	Same, except dark grayish brown (2.5Y 4/2), trace fine gravel, dense, very moist, alluvium.			6	25		
				11			
				11			
				20			
	Same, except very dark gray (2.5Y 4/3), minor sand lenses, moderately sorted, medium dense, wet, alluvium.			13	75		
				10			
	Same, except dark grayish brown (2.5Y 4/1), with fine to coarse grained sand, alluvium.			15			
				15			
55				9		0/0	Sample V7MW4-55 sent for physical tests.
				13			
				22			
	sandy silt very dark grayish brown (2.5Y 3/2), fine grained, well sorted, subrounded, medium dense, stiff, alluvium.	ML		3	75		
				5			
	silty sand dark grayish brown (2.5Y 4/2), fine to coarse grained, minor fine gravel, moderately sorted, subangular, medium dense, very moist, with dark brown wood pieces, alluvium.	SM		9			
				13			
				6	100	0/0	
				11			
				14			
60	Same, except decrease in gravel, increase in silt.			4			
				7			
	Same, except no gravel.			9			
				11			
	Same, except very loose and trace clay.			2			
				2			
	Same, except wood pieces now colored amber and red.			2			
				2			
65				2	100	0/0	
				2			
				2			
				2			
	sand dark gray (2.5Y 4/1) fine grained, trace medium grained sand, minor silt, well sorted, subrounded, medium dense, wet, alluvium.	SP		3			Sample V7MW4-65 sent for chemical tests.
				3			
				3			
	shale olive gray (5Y 4/2), hard, moist, weathered shale aquitard, possible Sisquoc Formation.	SHALE		9			TD of 12" auger = 67'.
							End Time 1545. TD of 8" auger = 68'.